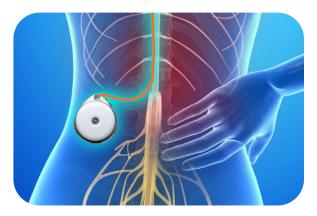


# Targeted Drug Delivery

## WHAT TARGETED DRUG DELIVERY?

Targeted drug delivery is a medical treatment designed to deliver pain medication or therapeutic agents directly to the spinal cord area using an intrathecal pain pump. This approach is primarily used for the management of severe, chronic pain that is not adequately controlled by oral medications or other pain management strategies.



### HOW DOES IT WORK?

The intrathecal drug delivery system, comprised of a programmable pump and catheter, releases small amounts of medication directly to the fluid around your spine. These medications, often opioids such as morphine or hydromorphone, interact with pain receptors in the spinal cord, reducing the transmission of pain signals to the brain. This targeted delivery method can result in more effective pain management.

Benefits of intrathecal pain pumps include better pain control, reduced side effects, and improved quality of life for people with intractable pain.

## WHO IS A GOOD CANDIDATE FOR TARGETED DRUG DELIVERY?

Intrathecal pain pumps are typically used for conditions associated with chronic and severe pain, such as:

• Failed back surgery syndrome

Neuropathic pain

- Cancer-related pain
- Complex regional pain syndrome (CRPS)

Targeted drug delivery can be effective for many individuals, but it may not be appropriate for everyone, and its use is determined on a case-by-case basis.

# WHAT TO EXPECT?

**TRIAL PROCEDURE:** Trialing an intrathecal pain pump is critical in determining the suitability and effectiveness of managing an individual's pain before a permanent device is considered. To trial a pain pump, one of our pain specialists will first assess your medical history and pain condition to confirm you are an appropriate candidate. During the trial, a temporary catheter is inserted into the intrathecal space around the spinal cord. To simulate how the pump would work, a small amount of medication is injected into the catheter. Afterward, the effectiveness of the medication is assessed. If the trial is successful and you choose to proceed, a surgical procedure is scheduled for the permanent implant of the device after it's approved by insurance.

- 2 IMPLANT PROCEDURE: The implantation of a pain pump involves a surgical procedure where a programmable device is placed under the skin, typically in the upper buttock. During the procedure, a catheter is threaded into the intrathecal space around the spinal cord and connected to the pump. The pump, containing a reservoir for pain-relief medications, is then implanted, and the incision is closed. Following a brief recovery, the pump is programmed to deliver medication. Regular follow-up appointments are scheduled to monitor the long-term effectiveness of the pain pump and make any necessary adjustments to optimize pain control. Unlike some surgical interventions for pain, targeted drug delivery is considered a reversible and non-destructive therapy. If needed, the device can be turned off or removed.
- **PUMP REFILLS:** It's important for you to attend scheduled refill appointments to ensure a consistent delivery of medication. The frequency of refills varies depending on factors such as pump size, the type of medication used, dosage, and your pain management needs.

#### INSURANCE AND BILLING

Insurance coverage for an intrathecal pain pump is usually granted when deemed medically necessary and compliant with your policy guidelines.

#### IMPROVE YOUR QUALITY OF LIFE

Pain pumps provide effective relief by delivering targeted medication directly to the affected area, reducing the need for high doses of opioids, and minimizing systemic side effects to enhance overall quality of life.





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